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### AMENDMENTS TO THE CLAIMS

1. (Original) A composition for delivering a bioactive metal ion to a mammal, the composition comprising an effective amount of a source of the bioactive metal ion, a phosphoprotein preparation obtained by partially cross linking a partial hydrolysate of casein or a caseinate, and one or more physiologically acceptable diluents or carriers.
2. (Original) A composition according to claim 1, wherein the metal ion is divalent.
3. (Currently amended) A composition according to claim 1 ~~[[or 2]]~~, wherein the metal ion is selected from the group consisting of calcium, iron, zinc, cobalt, copper and magnesium.
4. (Currently amended) A composition according to claim 1 ~~any one of claims 1 to 3~~, wherein the composition is an oral composition and comprises a foodstuff, beverage, or a pharmaceutical vehicle.
5. (Currently amended) A composition according to claim 1 ~~any one of the preceding claims~~, wherein the pH of the composition is between about 6 and about 9.
6. (Currently amended) A composition according to claim 1 ~~any one of the preceding claims~~, wherein the composition comprises a processed cheese product, and the source of a bioactive metal ion comprises natural milk calcium phosphate.
7. (Currently amended) A composition according to claim 1 ~~any one of the preceding claims~~, wherein the partial hydrolysate has been obtained by enzymatic hydrolysis of acid casein, rennet casein or a caseinate.
8. (Original) A composition according to claim 7, wherein the enzyme is trypsin.
9. (Currently amended) A composition according to claim 7 ~~[[or 8]]~~, wherein the degree of hydrolysis is in the range of about 3% to about 8% of the total number of peptide bonds.
10. (Original) A composition according to claim 9, wherein the degree of hydrolysis is in the range of about 3.5% to about 7%.
11. (Original) A composition according to claim 9, wherein the degree of hydrolysis is in the range of about 4% to about 6.5%.

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12. (Currently amended) A composition according to claim 7~~any one of the preceding claims~~, wherein the degree of hydrolysis is such that about 10% or less of the casein or caseinate is rendered insoluble at pH 7, by the partial hydrolysis.

13. (Original) A composition according to claim 12, wherein the degree of hydrolysis is such that about 5% or less of the casein or caseinate is rendered insoluble at pH 7, by the partial hydrolysis.

14. (Currently amended) A composition according to claim 1~~any one of the preceding claims~~, wherein the partial hydrolysate has been partially cross linked enzymatically, using the enzyme transglutaminase.

15. (Currently amended) A composition according to claim 1~~any one of the preceding claims~~, wherein the degree of partial cross linking is such that the resulting phosphoprotein preparation comprises about 10 or more  $\mu\text{mol}$  cross links per gram of protein.

16. (Currently amended) A composition according to claim 1~~any one of the preceding claims~~, wherein the degree of partial cross linking is such that the resulting phosphoprotein preparation comprises between about 10 and about 250  $\mu\text{mol}$  cross links per gram of protein.

17. (Currently amended) A composition according to claim 1~~any one of the preceding claims~~, wherein the degree of partial cross linking is such that the resulting phosphoprotein preparation comprises between about 50 and about 160  $\mu\text{mol}$  cross links per gram of protein.

18. (Currently amended) A method of delivering metal ion to a mammal, comprising administering to the mammal a composition according to claim 1~~any one of the preceding claims~~.

19. (Currently amended) A composition for remineralizing tooth enamel and/or for treating or preventing one or more conditions selected from the group consisting of dental caries, tooth erosion, dentinal hypersensitivity and~~and~~~~or~~ gingivitis in a mammal, wherein the composition comprises an effective amount of a phosphoprotein preparation in combination with one or more carriers or diluents, wherein the phosphoprotein preparation has been obtained by partially cross linking a partial hydrolysate of casein or a caseinate.

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20. (Currently amended) A composition according to claim 19, wherein the partial hydrolysate has been obtained by enzymatic hydrolysis of~~[[or]]~~ acid casein, rennet casein or a caseinate.

21. (Original) A composition according to claim 20, wherein the enzyme is trypsin.

22. (Currently amended) A composition according to claim 19~~any one of claims 19 to 21~~, wherein the degree of hydrolysis is in the range of about 3% to about 8% of the total number of peptide bonds.

23. (Original) A composition according to claim 22, wherein the degree of hydrolysis is in the range of about 3.5% to about 7%.

24. (Original) A composition according to claim 22, wherein the degree of hydrolysis is in the range of about 4% to about 6.5%.

25. (Currently amended) A composition according to claim 19~~any one of claims 19 to 24~~, wherein the degree of hydrolysis is such that about 10% or less of the casein or caseinate is rendered insoluble at pH 7, by the partial hydrolysis.

26. (Original) A composition according to claim 25, wherein the degree of hydrolysis is such that about 5% or less of the casein or caseinate is rendered insoluble at pH 7, by the partial hydrolysis.

27. (Currently amended) A composition according to claim 19~~any one of claims 19 to 26~~, wherein the partial hydrolysate has been partially cross linked enzymatically, using the enzyme transglutaminase.

28. (Currently amended) A composition according to claim 19~~any one of claims 19 to 27~~, wherein the degree of partial cross linking is such that the resulting phosphoprotein preparation comprises about 10 or more  $\mu\text{mol}$  cross links per gram of protein.

29. (Original) A composition according to claim 28, wherein the degree of partial cross linking is such that the resulting phosphoprotein preparation comprises between about 10 and about 250  $\mu\text{mol}$  cross links per gram of protein.

30. (Original) A composition according to claim 28, wherein the degree of partial cross linking is such that the resulting phosphoprotein preparation comprises between about 50 and about 160  $\mu\text{mol}$  cross links per gram of protein.

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31. (Currently amended) A composition according to claim 19~~any one of claims 19 to 30~~, further comprising a source of calcium ions.

32. (Original) A composition according to claim 31, wherein the composition further comprises a source of phosphate ions.

33. (Original) A composition according to claim 30, wherein the composition further comprises calcium phosphate.

34. (Original) A composition according to claim 30, wherein the composition further comprises natural milk calcium.

35. (Currently amended) A composition according to claim 31~~any one of claims 31 to 34~~, wherein calcium ions are present in the composition at a level of at least about 5 mmol calcium ions per gram of phosphoprotein preparation.

36. (Original) A composition according to claim 35, wherein calcium ions are present in the composition at a level of at least about 10 mmol calcium ions per gram of phosphoprotein.

37. (Currently amended) A composition according to claim 32~~any one of claims 32 to 36~~, wherein the molar ratio of calcium ions to phosphate ions is in the range of about 0.8-1.2:0.4-0.8.

38. (Original) A composition according to claim 37, wherein the molar ratio of calcium ions to phosphate ions is about 1:0.6.

39. (Currently amended) A composition according to claim 19~~any one of claims 19 to 30~~, wherein the composition further comprises a source of strontium ions.

40. (Original) A composition according to claim 39, wherein the composition further comprises a source of fluoride ions.

41. (Currently amended) A composition according to claim 19~~any one of claim 19 to 40~~, wherein the composition comprises a composition selected from the group consisting of a mouthwash, a dentifrice, toothpaste, a powder, an emulsion and~~and~~[[or]] a gel.

42. (Currently amended) A composition according to claim 19~~any one of claims 19 to 33~~, wherein the composition comprises an emulsion, wherein the phosphoprotein preparation is present in an amount of about 1% to about 15% by weight of the emulsion, and the emulsion

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further comprises natural milk calcium phosphate, in an amount of about 3% to about 12% by weight of the emulsion.

43. (Currently amended) A composition according to claim 19~~any one of claims 19 to 40~~, wherein the composition comprises a foodstuff and~~and~~ [[or]] a confection.

44. (Currently amended) A method for remineralising tooth enamel and/or for treating or preventing one or more conditions selected from the group consisting of dental caries, tooth erosion, dentinal hypersensitivity and~~and~~ [[or]] gingivitis in a mammal, the method comprising contacting the teeth of the mammal with a composition according to claim 19~~any one of claims 19 to 43~~.

45. (Original) A phosphoprotein preparation, which has been obtained by partially cross linking a partial hydrolysate of casein or a caseinate, and wherein the degree of partial hydrolysis of the casein or caseinate prior to cross linking is in the range of about 3% to about 8% of the total number of peptide bonds, and the degree of partial cross linking is such that the phosphoprotein preparation comprises about 10 or more  $\mu\text{mol}$  cross links per gram of protein.

46. (Original) A phosphoprotein preparation according to claim 45, wherein the degree of partial hydrolysis of the casein or caseinate prior to cross linking is in the range of about 3.5% to about 7%.

47. (Original) A phosphoprotein preparation according to claim 45, wherein the degree of partial hydrolysis of the casein or caseinate prior to cross linking is in the range of about 4% to about 6.5%.

48. (Currently amended) A phosphoprotein preparation according to claim 45~~any one of claim 45 to 47~~, wherein the degree of partial cross linking is such that the phosphoprotein preparation comprises between about 10 and about 250  $\mu\text{mol}$  cross links per gram of protein.

49. (Currently amended) A phosphoprotein preparation according to claim 45~~any one of claims 45 to 47~~, wherein the degree of partial cross linking is such that the phosphoprotein preparation comprises between about 50 and about 160  $\mu\text{mol}$  cross links per gram of protein.

50. (Currently amended) A phosphoprotein preparation according to claim 45~~any one of claims 45 to 49~~, wherein the degree of hydrolysis is such that about 10% or less of the casein or caseinate is rendered insoluble at pH 7, by the partial hydrolysis.

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51. (Currently amended) A phosphoprotein preparation according to claim 45~~any one of claims 45 to 49~~, wherein the degree of hydrolysis is such that about 5% or less of the casein or caseinate is rendered insoluble at pH 7, by the partial hydrolysis.